

## TESTING THE PHRASE COMPLETION RESPONSE OPTION FORMAT IN A SOCIOPOLITICAL CONTROL SCALE FOR YOUTH<sup>1</sup>

N. Andrew Peterson\*, Kristen Gilmore Powell\*,  
Christina Hamme Peterson\*\* and Robert J. Reid\*\*\*

*Measurement of psychological empowerment among youth has relied on scales that use a Likert-type format, which has been subject to critique. Phrase completion is a technique that has been introduced as an alternative to the Likert-type format. This study tested the application of a phrase completion response option format in a measure of psychological empowerment, the abbreviated Sociopolitical Control Scale for Youth, with data from a sample of high school students (n = 202) from an economically disadvantaged community located in the northeastern United States. Prior to testing the new measure, we evaluated the validity of the abbreviated version of the original scale using the Likert-type format with data from a separate sample of high school students (n = 977) from the same geographic community. Results supported the validity of both formats of the scale; however, the performance of scores from the phrase completion format was superior to the Likert-type format. Findings imply that the phrase completion format, which heretofore has not appeared in the empowerment literature, may be considered a useful form in which to construct instruments that are intended to measure empowerment among youth.*

**Keywords:** *empowerment, sociopolitical control, measurement*

### 1. Testing the Phrase Completion Response Option Format in a Sociopolitical Control Scale for Youth

Likert-type and phrase completion response option formats are techniques that can be applied to the design of instruments for measuring a wide variety of psychological constructs. The Likert-type format (Likert, 1932) is one of the most frequently used techniques in health and social sciences for constructing instrument items. Items created in this format typically consist of

---

<sup>1</sup> This paper was supported in part by funding from the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention, Grant No. SP-15104. The views expressed in this paper are those of the authors and do not necessarily represent the position of the sponsoring agency.

\* School of Social Work, Rutgers University, USA ✉

\*\* Department of Graduate Education, Leadership, and Counseling, Rider University, USA

\*\*\* Department of Family and Child Studies, Montclair State University, USA

---

positively or negatively worded statements followed by a set of ordered responses that may include adverbs and verbs (e.g., “*strongly agree*”). Survey or interview participants can be asked to respond to the items by indicating the extent to which they agree or disagree, for instance, with each statement. The number of points or categories of response options included in Likert-type items can vary, usually ranging from four- to seven-point scales, with midpoint categories that are often labeled as “*neutral*,” “*undecided*,” or “*neither*” (Leung, 2011; Sturgis, Roberts, & Smith, 2014). The application of this technique is ubiquitous in community psychology. Recent examples include studies of psychological sense of community (Barbieri & Zani, 2015; Petrillo, Capone, & Donizzetti, 2016; Zani & Cicognani, 2012), social support (Marshall, Davis, Lawrence, Peugh, & Toland, 2016), leadership development (Hakim, Crigan, & Buzu, 2013), and neighborhood collective efficacy (Banyard, Weber, Grych, & Hamby, 2016), as well as psychological empowerment (Christens, Krauss, & Zeldin, 2016).

Though popular, Likert-type items have been subject to critique. Among the issues identified in the literature are the detrimental effects of combining positively and negatively worded items on the factor structure and internal consistency of scores (Peterson et al., 2006; Stevens, Jason, Ferrari, Olson, & Legler, 2012), measurement error resulting from the treatment of numerical values from midpoint responses as moderate levels of variables (Sturgis et al., 2014), and the Type I or Type II errors that can result from the coarseness of ordinal data (particularly four or five-point scales), which are derived from Likert-type items (Finstad, 2010; Russell & Bobko, 1992). This coarseness may also result in a lack of variability in scores from Likert-type scales, making it more difficult for researchers to detect subtle differences in the underlying trait or state.

The phrase completion response option format (Hodge & Gillespie, 2003, 2005, 2007) was introduced as an alternative technique that addresses criticisms of the Likert-type format. The phrase completion technique does not use negatively worded items, nor does it use midpoint responses that are incongruous with the meaning of moderate levels of variables. It does, however, include a response key that is intended to more closely approximate internal-level data. More specifically, this technique involves the presentation of an incomplete sentence fragment (e.g., *There are \_\_\_\_\_ for people like me to have a say in what this community does*), which is then followed by two opposing phrases (e.g., *very few ways*, *plenty of ways*) that can be used to complete the sentence fragment. The phrases are configured to anchor each end of a scale, such as a 10-point or 11-point response key. The range of numerical values in the scale provide study participants with a continuum to which they can respond, with lower numbers corresponding to lower levels of an attribute and higher numbers corresponding to higher levels of an attribute. Participants can be asked to respond to the items by indicating the point along the continuum that best reflects their views, feelings, or attitudes. The technique is intended to yield a unidimensional measure of the construct of interest.

Although phrase completion is a technique that has not yet appeared in the community psychology literature, it has been applied in research from a wide variety of other disciplines. For example, it has been applied by management researchers to study competition and perceived trustworthiness among staff of children’s behavioral health organizations (Bunger, 2013), cardiovascular nurses to assess chronic heart failure (Dunderdale, Thompson, Beer, Furze, & Miles, 2008), as well as researchers studying the role of intrinsic, nonreligious spirituality in sexual minority identity development (Wright & Stern, 2016) and the healthcare challenges of women with autism spectrum disorder (Lum, Garnett, & O’Connor, 2014). Although these researchers included phrase completion in the design of their instruments, they did not compare

---

the validity of scores from Likert-type and phrase completion formats. The few studies that have directly compared these competing formats of instruments intended to measure the same constructs have found that scores from the phrase completion format tend to exhibit better performance than the Likert-type format as demonstrated by stronger fit indices, indicating better model-to-data fit, factor loadings, indicating stronger relationships between items and constructs, and reliability coefficients, indicating greater internal consistency (Hodge & Gillespie, 2003, 2007; Peters, Nasan, & Turner, 2007).

No study to date has tested the use of a phrase completion format with a measure of psychological empowerment. Empowerment is a major phenomenon of interest for community psychology (Aguilar, 2013; Paloma, García-Ramírez, Camacho, & Olmedo, 2016; Rappaport, 1981, 1987). It refers to the process through which people gain greater control of their lives and reduce marginalization (Maton, 2008). Zimmerman (1995) introduced a widely applied theoretical model of psychological empowerment, which was recently augmented by Christens (2012) to include four interrelated components: emotional, cognitive, behavioral, and relational. The emotional component involves people's feelings and self-perceptions about their abilities to influence sociopolitical contexts, such as work, school, or other community settings. The cognitive component involves people's consciousness of their sociopolitical milieu, while the behavioral component refers to people's actions to directly affect outcomes. The relational component involves psychological aspects of interpersonal transactions and processes, which may include collaborative competence and efforts to facilitate others' empowerment.

Most empirical studies applying the conceptual models of Zimmerman (1995) or Christens (2012) have focused on the emotional component of psychological empowerment. These studies have often focused on an element of the emotional component referred to as sociopolitical control (SPC) (Itzhaky, Zanbar, Levy, & Schwartz, 2013; Krauss et al., 2014; Serrata, Hernandez-Martinez, & Macias, 2016). With few exceptions, such as Holden, Evans, Hinnant, & Messeri's (2005) modeling of a unidimensional construct, researchers have applied a bidimensional model of SPC. Based on the work of Zimmerman and Zahniser (1991), SPC has generally been conceptualized and measured as a construct consisting of the dimensions of leadership competence and policy control. Leadership competence refers to people's feelings about their skills at organizing a group of people, while policy control involves people's feelings about their abilities to influence policy decisions in an organization or community. Efforts to measure SPC have relied heavily on a four or five-point Likert-type response option format to assess the construct (e.g., Christens et al., 2016; Martínez, Loyola, & Cumsille, 2015; Miguel, Ornelas, & Maroco, 2015; Serrata et al., 2016).

The purpose of this study was to test the application of a phrase completion response option format in a measure of SPC with data from a sample of high school students from an economically disadvantaged community located in the northeastern United States. Prior to testing the new phrase completion formatted measure, we evaluate the validity of the original Likert-type scale using data from a separate sample of high school students from the same geographic community. We then compare the performance of scores from items formatted using the Likert-type approach (Sample 1) to scores from items formatted using phrase completion (Sample 2). We hypothesized that, for both versions (i.e. Likert-type and phrase completion) of the scale, the two-factor model of SPC would provide a significantly better fit to the data from youth than the one-factor model of SPC. We also hypothesized that the performance of scores from the phrase completion format would be superior to the Likert-type format as indicated by fit indices, factor loadings, reliability coefficients, and the strength of the relationship between

---

latent variables representing the dimensions of SPC. Improved measurement of the leadership competence and policy control dimensions of SPC would be valuable to studies that evaluate more generally those interventions that promote youth development, citizenship, and the emotional component of psychological empowerment. Given that valid measurement is foundational to advances in empowerment theory, as well as the criticisms of the widely used Likert-type format to measure this element of empowerment, this research was needed to test a phase completion format of an instrument for assessing SPC among youth in an applied community context.

## **2. Method**

### **2.1 Participants**

Participants in Sample 1 ( $n = 977$ ) were students from three high schools that were surveyed in year 2007 as part of an ongoing preventive intervention in an urban community located in the northeastern United States (Reid, Garcia-Reid, Klein, & McDougall, 2008). Convenience samples of students from the high schools were selected and data from their surveys were combined for analysis. This sample was 59.9% female and 56.1% Hispanic. In addition, the sample was 35.7% Black or African American; and, 4.6% white, non-Hispanic. Regarding age, 5.5% of the participants were age 14; 17% of participants were age 15; 23.4% of participants were age 16; and, 54.1% of participants were ages 17 or 18.

Participants in Sample 2 ( $n = 202$ ) were students from one high school located in the same geographic community as those in Sample 1. These students in Sample 2 were surveyed in year 2014 as part of the same ongoing preventive intervention. A convenience sample of students from the high school was selected. This sample was 52% female and 75% Hispanic. In addition, the sample was 24% Black or African American; and, 8% white, non-Hispanic. Regarding age, approximately 12% of the participants were age 14; 32% of participants were age 15; 27% of participants were age 16; and, 29% of participants were ages 17 or 18.

### **2.2 Measures**

**Sociopolitical Control.** An abbreviated version of the original Sociopolitical Control Scale for Youth (SPCS-Y) (Peterson, Peterson, Agre, Christens, & Morton, 2011) was tested in this study. The abbreviated scale was comprised of eight items and used a five-point Likert-type response option format. Items are shown in the Appendix. Consistent with the original scale, the abbreviated version of the SPCS-Y contained two subscales. The first subscale was comprised of four items to assess leadership competence, while the second subscale included four items to assess policy control. Christens et al. (2016) validated the abbreviated version of the scale that had been translated for Malaysian youth. The descriptive statistics reported by Christens et al. (2016) were as follows: overall scale ( $\alpha = .79$ ;  $M = 3.32$ ;  $SD = .58$ ); leadership competence subscale ( $\alpha = .74$ ;  $M = 3.32$ ;  $SD = .72$ ); policy control subscale ( $\alpha = .68$ ;  $M = 3.31$ ;  $SD = .68$ ). For the present study, descriptives of the Likert-type format of the abbreviated SPCS-Y were as follows: overall scale ( $\alpha = .80$ ;  $M = 3.56$ ;  $SD = .72$ ); leadership competence subscale ( $\alpha = .71$ ;  $M$

---

= 3.63;  $SD = .82$ ); policy control subscale ( $\alpha = .72$ ;  $M = 3.49$ ;  $SD = .81$ ).

Items from the original version of the SPCS-Y were modified to the phrase completion response option format and tested in this study. These items are also shown in the Appendix. Consistent with previous work, the phrase completion format of the SPCS-Y (overall scale:  $\alpha = .86$ ;  $M = 5.71$ ;  $SD = 2.02$ ) was designed to contain two subscales: Leadership competence ( $\alpha = .78$ ;  $M = 6.12$ ;  $SD = 2.33$ ) and policy control ( $\alpha = .80$ ;  $M = 5.29$ ;  $SD = 2.12$ ). For both the Likert-type and phrase completion formats, item responses were coded so that higher scores reflect greater SPC and item values were averaged to create subscale and overall scale scores.

### **2.3 Procedures**

Participants were surveyed as part of a federally-funded initiative to prevent substance abuse and sexual risk taking behaviors among racial and ethnic minority youth in an urban community. The sample setting is considered among the 30 poorest school districts and has among the highest rates for substance abuse and certain sexually-transmitted diseases in this northeastern U.S. state. Self-administered written surveys were distributed by school district personnel in health education classes.

## **3. Results**

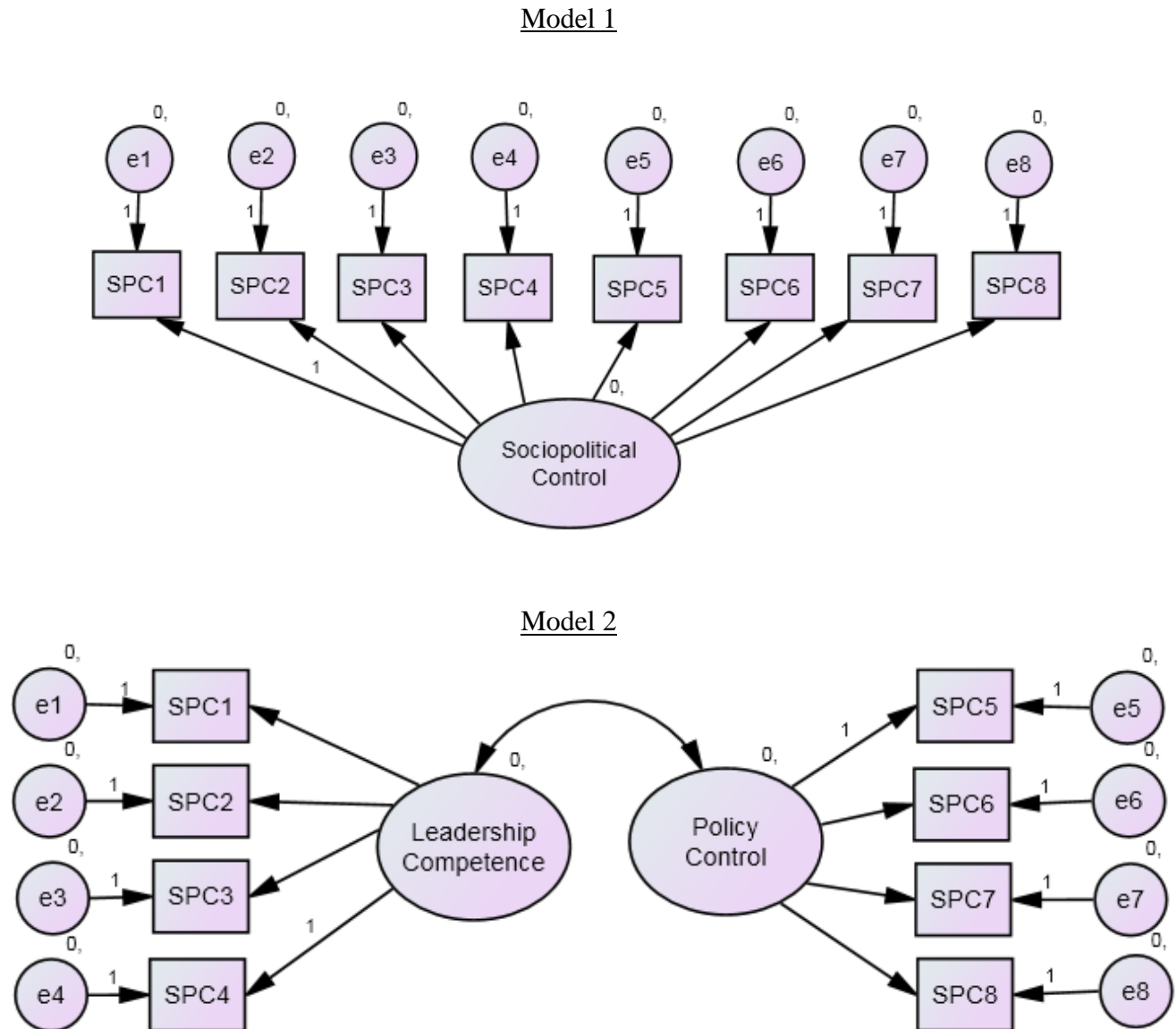
The purpose of the study was to test an abbreviated version of the SPCS-Y that was presented in a phrase completion response option format. We chose to test the abbreviated version of the SPCS-Y because this scale, given our sample size, allowed us to obtain an adequate (5:1) ratio of participants to the number of parameters (Bentler & Chou, 1987; Worthington & Whittaker, 2006). Prior to testing the new measure, we examine the factor structure of the abbreviated version of the original Likert-type scale with Sample 1. We then present results of our analysis of the data from Sample 2 in which the abbreviated version of the SPCS-Y was administered using a phrase completion response option format.

Figure 1 presents the models that were tested in this study. Confirmatory factor analysis (CFA) was used to test the two first-order measurement models: Model 1, a first-order unidimensional model for the SPCS-Y in which the eight items were hypothesized as reflections of one underlying SPC construct; and Model 2, a first-order bidimensional model for the SPCS-Y in which four items were hypothesized as reflecting each of the two latent variables of leadership competence and policy control. In addition, as can be seen in Figure 1, the latent variables in Model 2 were hypothesized as correlated.

We performed CFA using maximum likelihood estimation procedures of AMOS 23 (Arbuckle, 2014). The fit indices that we interpreted from our CFA are widely accepted and considered to be robust measures of fit. These include the following: Discrepancy chi-square ( $X^2$ ), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and the Root Mean Square of Error Approximation (RMSEA). Although non-significant  $X^2$  values indicate that a model provided a good fit to the data from the sample of respondents, we recognize that this statistic is influenced by sample size and is often considered an unrealistic standard.

With regard to the other fit indices, higher values (i.e., greater than .95) on the CFI and TLI indicate good model-to-data fit. According to Browne and Cudeck (1992) guidelines for

interpreting the RMSEA include:  $<.05$  = good fit;  $.05-.08$  = acceptable fit;  $.08-.10$  = marginal fit;  $>.10$  = poor fit.



**Figure 1. Models tested in the present study. Items correspond to those presented in the Appendix**

Table 1 presents fit indices for the CFAs of the Likert-type (Sample 1) and phrase completion (Sample 2) formatted versions of the abbreviated SPCS-Y. As can be seen in Table 1, the one-factor solution for the SPCS-Y (Model 1) provided a poor fit to the data from both samples. For Sample 1, the CFI and TLI were both below .95, indicating poor model-to-data fit for the one-factor solution. This pattern of CFI and TLI values was similar for Sample 2, with lower CFI and TLI values indicating a poor fit of the model to the data. In addition, the RMSEA values for the one-factor solution were generally weak, with values indicating a marginal model-to-data fit for

Sample 1 and poor model-to-data fit for Sample 2.

**Table 1. Overall Fit Statistics for Confirmatory Factor Analyses of the Likert-Type and Phrase Completion Response Option Formats of the Abbreviated Sociopolitical Control Scale for Youth (SPCS-Y)**

Measures of Fit	Structural Equation Models			
	Sample 1, <i>n</i> = 977		Sample 2, <i>n</i> = 202	
	Likert-Type		Phrase Completion	
	Model 1: One-Factor SPCS-Y	Model 2: Two-Factor SPCS-Y	Model 1: One-Factor SPCS-Y	Model 2: Two-Factor SPCS-Y
$X^2$	204.539	76.106	61.492	27.621
<i>Df</i>	20	19	20	19
p-value	<.001	<.001	<.001	.091
CFI	.887	.965	.915	.982
TLI	.797	.934	.847	.967
RMSEA	.097	.055	.102	.048
(90% CI)	(.085, .110)	(.043, .069)	(.073, .131)	(.000, .064)

The fit indices for the two-factor solution (Model 2) for the SPCS-Y, which are also shown in Table 1, indicate a better fit to the data from both samples. For Sample 1, the CFI for Model 2 was above .95, while the low RMSEA value for this two-factor solution indicated acceptable model-to-data fit. For Sample 2, both the CFI and TLI were greater than .95, indicating good model-to-data fit for Model 2. In addition, the lower RMSEA value for Sample 2 indicates a good model-to-data fit for the two-factor solution. The 90% Confidence Intervals (CIs) for the RMSEA values presented in Table 1 can indicate a statistically significant difference in fit between Models 1 and 2 by the extent of overlap between the CIs. For Sample 1, the CIs did not overlap between Models 1 and 2, indicating that the two models fit the data differently. Again, this pattern of values was similar for Sample 2. Together, these results show that Model 2, which had the smallest RMSEA values in both samples, may be interpreted as fitting the data significantly better than Model 1.

It is important to recognize that although the hypothesized two-factor model for the SPCS-Y fit the data better than the one-factor model, the fit indices for the phrase completion scale (Sample 2) were consistently stronger than those for the Likert-type scale (Sample 1). As can be seen in Table 1, a comparison of the CFI, TLI and RMSEA values for both samples shows that the phrase completion scale had higher CFI and TLI values, and a lower RMSEA value, than the Likert-type scale. Understanding that scores from the phrase completion scale performed better on measures of fit than those from the Likert-type scale are helpful in interpreting the regression weights shown in Table 2.

Table 2 presents standardized regression weights, also referred to as factor loadings, from the CFAs that were performed to test the one-factor and two-factor models of the SPCS-Y. These regression weights indicate the strength of each SPCS-Y item in relation to the hypothesized factors that were tested in our study. As can be seen in Table 2, the regression weights for Model 2 were consistently stronger than Model 1 for both samples. For Sample 1, regression weights for Model 1 were weaker, ranging from .529 to .637, while the coefficients for Model 2 were stronger, ranging from .550 to .672. We can see a similar pattern of regression weights for Sample 2 in which the coefficients for Model 2 were generally stronger than those for Model 1.

**Table 2. Standardized Regression Weights for Abbreviated Sociopolitical Control Scale for Youth (SPCS-Y) Confirmatory Factor Analyses\***

Item	Sample 1, <i>n</i> = 977		Sample 2, <i>n</i> = 202	
	<u>Likert-Type</u>		<u>Phrase Completion</u>	
	Model 1	Model 2	Model 1	Model 2
	One-Factor SPCS-Y	Two-Factor SPCS-Y	One-Factor SPCS-Y	Two-Factor SPCS-Y
		Leadership Competence    Policy Control		Leadership Competence    Policy Control
SPC1	.576	.639	.622	.664
SPC2	.577	.638	.669	.778
SPC3	.637	.672	.709	.751
SPC4	.529	.550	.592	.584
SPC5	.539		.637	
SPC6	.568		.669	
SPC7	.537		.698	
SPC8	.603		.671	

\* Items correspond to the SPCS-Y as shown in the Appendix. Correlations between latent constructs in Model 2: Sample 1,  $r = .71$ ; Sample 2,  $r = .77$ .

For Sample 2, regression weights for Model 1 ranged from .592 to .709, while for Model 2 the regression weights ranged from .584 to .778.

Importantly, however, a comparison of the regression weights presented in Table 2 for Model 2 shows that the strength of the SPCS-Y items in relation to the hypothesized factors of leadership competence or policy control was greater for the phrase completion format (Sample 2) than the Likert-type format (Sample 1). Furthermore, the bivariate correlation between latent factors representing leadership competence and policy control was stronger in Sample 2 with the phrase completion format ( $r = .77$ ,  $p < .001$ ) than in Sample 1 with the Likert-type format ( $r = .71$ ,  $p < .001$ ). Taken together, the results support the factorial validity of scores from both formats of the abbreviated SPCS-Y; however, the performance of scores from the phrase completion format was stronger than the Likert-type format.

## 4. Discussion

Sociopolitical control is an important element of the emotional component of psychological empowerment. This study tested a new version of an instrument, the abbreviated SPCS-Y, which was designed to measure SPC control using a phrase completion response option format. We also compared the performance of scores from items of the abbreviated SPCS-Y that were constructed using a phrase completion format to items formatted using the Likert-type approach. Our results indicated that the hypothesized two-factor model of the SPCS-Y provided a good fit to the data from both samples of youth, and that this model provided a significantly better fit to the data than the one-factor model of the SPCS-Y. Notably, however, the scores from the phrase completion format demonstrated stronger fit indices, factor loadings, reliability coefficients, and correlation between latent variables representing dimensions of leadership competence and policy control. These findings provide empirical support for the validity of the new abbreviated SPCS-Y and have important implications for empowerment research and practice.



---

Previous studies that have focused on measuring SPC have relied exclusively on scales that use a Likert-type format (e.g., Christens et al. 2016; Martínez et al., 2015; Miguel et al., 2015; Serrata et al., 2016). This format, however, has been subject to critique. Phrase completion has been recommended as an alternative to the Likert-type format (Hodge & Gillespie, 2003, 2005, 2007). Our study's findings provided support for the validity of the abbreviated SPCS-Y and suggest that the phrase completion format, which heretofore has not appeared in the community psychology (nor broader empowerment) literature, may be considered by researchers and practitioners as a better form in which to construct instruments that are intended to measure empowerment among youth.

Use of the phrase completion format in the SPCS-Y, shown here as an improved measure of empowerment concepts, is recommended for strengthening the validity of future research, especially those studies that are evaluating community-based preventive interventions designed to improve psychological empowerment. Given the growing focus on measurable outcomes of empowerment-based interventions (e.g., McAllister, Dunn, Payne, Davies, & Todd, 2012; Morton & Montgomery, 2013), the use of valid measurement tools can be a crucial part of effective practice. In addition, our findings support retention of the theoretical bidimensional model of SPC as proposed by Zimmerman and Zahniser (1991). The use of theory-driven and valid empowerment scales can be useful to practitioners for strengthening needs assessments and evaluations of community-based initiatives.

We provided a direct test to determine if the scores from Likert-type and phrase completion formats differed in performance among two samples of youth from the same geographic community. The results of our analysis of the Likert-type formatted version of the abbreviated SPCS-Y were comparable with those of Christens et al.'s (2016) study. In that study, the researchers tested the abbreviated version of the SPCS-Y that was translated for Malaysian youth. They also conducted CFA to evaluate the hypothesized two-factor model (i.e., leadership competence and policy control). The fit indices that Christens et al. (2016) reported for their model were comparable to those in our study; however, scores from the phrase completion subscales in our study were more reliable and the factor loadings were generally stronger than scores from the Likert-type scale in Christens et al.'s (2016) study.

Future research should test the full version of the SPCS-Y in a phrase completion format and examine ways to address response set bias and related issues. The mixed use of negatively and positively worded items was originally proposed as a method to reduce response set bias, acquiescent or disacquiescent behaviors, as well as careless responding (Likert, 1932). A large body of research, however, has shown that the combination of negatively and positively worded items in Likert-type scales has adverse effects on the factor structure and internal consistency of scores (e.g., Peterson et al., 2006; Stevens et al., 2012). As a result, measurement experts have advocated for the abandonment of this practice (DeVellis, 2012). Although negative wording is not of concern in the phrase completion format, the issues related to response set bias should be addressed in future research by alternating the direction of response options in the scale (i.e., half the items would range from 1 to 10, while the other half would range from 10 to 1). This approach should be tested as a way to further develop the phrase completion version of the SPCS-Y.

There were limitations to our research that should be recognized. First, the generalizability of our findings are limited due to the non-random sampling procedures we used in the study. Second, our study was limited by its focus on the emotional component of psychological empowerment and its test of only an abbreviated version of the SPCS-Y. Future research should

---

collect data from larger, random samples of youth and test a broader array of empowerment measures tapping cognitive, behavioral, and relational components of the construct. These limitations were offset, in part, by the inclusion of data from a diverse sample of youth and the use of CFA to test competing measurement models and formats of the SPCS-Y. Despite these limitations, our paper introduces readers to an alternative to the Likert-type format that is commonly used in instruments for measuring psychological empowerment among youth. The study's findings are consistent with previous research and suggest that the phrase completion format may be useful to practitioners as they continue to develop and evaluate interventions that further enhance youth empowerment.

## References

- Aguiar, J. (2013). Empowerment – A relational challenge. *Global Journal of Community Psychology Practice*, 3(4), 1-4.
- Arbuckle, J.L. (2014). *IBM SPSS Amos 23 user's guide*. Chicago, IL: IBM SPSS.
- Banyard, V., Weber, M. C., Grych, J., & Hamby, S. (2016). Where are the helpful bystanders? Ecological niche and victims' perceptions of bystander intervention. *Journal of Community Psychology*, 44(2), 214-231. doi: 10.1002/jcop.21760.
- Barbieri, I., & Zani, B. (2015). Multiple sense of community, identity and wellbeing in a context of multi culture: A mediation model. *Community Psychology in Global Perspective*, 1(2), 40-60.
- Bentler, P. M., & Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods & Research*, 16(1), 78-117. doi: 10.1177/0049124187016001004.
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21(2), 230-258. doi: 10.1177/0049124192021002005.
- Bunger, A. C. (2013). Administrative coordination in nonprofit human service delivery networks: The role of competition and trust. *Nonprofit and Voluntary Sector Quarterly*, 42(6), 1155-1175. doi: 10.1177/0899764012451369.
- Christens, B. D. (2012). Toward relational empowerment. *American Journal of Community Psychology*, 50(1-2), 114-128. doi: 10.1007/s10464-011-9483-5.
- Christens, B. D., Krauss, S. E., & Zeldin, S. (2016). Malaysian validation of a sociopolitical control scale for youth. *Journal of Community Psychology*, 44(4), 531-537. doi: 10.1002/jcop.21777.
- DeVellis, R. F. (2012). *Scale development: Theory and applications*. Thousand Oaks, CA: Sage Publications.
- Dunderdale, K., Thompson, D. R., Beer, S. F., Furze, G., & Miles, J. N. (2008). Development and validation of a patient-centered health-related quality-of-life measure: the Chronic Heart Failure Assessment Tool. *Journal of Cardiovascular Nursing*, 23(4), 364-370. doi: 10.1097/01.JCN.0000317439.82704.e8.
- Finstad, K. (2010). Response interpolation and scale sensitivity: Evidence against 5-point scales. *Journal of Usability Studies*, 5(3), 104-110.
- Hakim, S., Crigan, N., & Buzu, A. (2013). Construire viitorul lor propriu/Building their own futures: Making youth leadership development work in the Republic of Moldova. *Global Journal of Community Psychology Practice*, 4(1), 1-12.

- 
- Hodge, D. R., & Gillespie, D. F. (2003). Phrase completions: An alternative to Likert scales. *Social Work Research*, 27(1), 45-55.
- Hodge, D. R., & Gillespie, D. F. (2005). Phrase completion scales. In K. Kempf-Leonard (Eds.). *Encyclopedia of social measurement*, 3, 53-62. San Diego: Academic Press.
- Hodge, D. R., & Gillespie, D. F. (2007). Phrase completion scales: a better measurement approach than Likert scales? *Journal of Social Service Research*, 33(4), 1-12. doi: 10.1300/J079v33n04\_01.
- Holden, D. J., Evans, W. D., Hinnant, L. W., & Messeri, P. (2005). Modeling psychological empowerment among youth involved in local tobacco control efforts. *Health Education & Behavior*, 32(2), 264-278. doi: 10.1177/1090198104272336.
- Itzhaky, H., Zanbar, L., Levy, D., & Schwartz, C. (2013). The contribution of personal and community resources to well-being and sense of belonging to the community among community activists. *British Journal of Social Work*, 45(6), 1678-1698. doi: 10.1093/bjsw/bct176.
- Krauss, S. E., Collura, J., Zeldin, S., Ortega, A., Abdullah, H., & Sulaiman, A. H. (2014). Youth-adult partnership: Exploring contributions to empowerment, agency and community connections in Malaysian youth programs. *Journal of Youth and Adolescence*, 43(9), 1550-1562. doi: 10.1007/s10964-013-0027-1.
- Lenzi, M., Vieno, A., Santinello, M., Nation, M., & Voight, A. (2014). The role played by the family in shaping early and middle adolescent civic responsibility. *The Journal of Early Adolescence*, 34(2), 251-278. doi: 10.1177/0272431613485822.
- Leung, S. O. (2011). A comparison of psychometric properties and normality in 4-, 5-, 6-, and 11-point Likert scales. *Journal of Social Service Research*, 37(4), 412-421. doi: 10.1080/01488376.2011.580697.
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 140, 1-55.
- Lum, M., Garnett, M., & O'Connor, E. (2014). Health communication: A pilot study comparing perceptions of women with and without high functioning autism spectrum disorder. *Research in Autism Spectrum Disorders*, 8(12), 1713-1721. doi: 10.1016/j.rasd.2014.09.009.
- Marshall, J. H., Davis, M. C., Lawrence, E. C., Peugh, J. L., & Toland, M. D. (2016). Mentors' perceived program support scale: Development and initial validation. *Journal of Community Psychology*, 44(3), 342-357. doi: 10.1002/jcop.21772.
- Martínez, M. L., Loyola, L. I., & Cumsille, P. (2015). Quality of participation in youth organizations relationships with identity and sense of sociopolitical control. *Youth & Society*. doi: 10.1177/0044118X15604341.
- Maton, K. I. (2008). Empowering community settings: Agents of individual development, community betterment, and positive social change. *American Journal of Community Psychology*, 41(1-2), 4-21. doi: 10.1007/s10464-007-9148-6.
- McAllister, M., Dunn, G., Payne, K., Davies, L., & Todd, C. (2012). Patient empowerment: The need to consider it as a measurable patient-reported outcome for chronic conditions. *BMC Health Services Research*, 12(1), 157. doi: 10.1186/1472-6963-12-157.
- Miguel, M. C., Ornelas, J. H., & Maroco, J. P. (2015). Defining Psychological Empowerment Construct: Analysis of three empowerment scales. *Journal of Community Psychology*, 43(7), 900-919. doi: 10.1002/jcop.21721.
-

- 
- Morton, M. H., & Montgomery, P. (2013). Youth empowerment programs for improving adolescents' self-efficacy and self-esteem: A systematic review. *Research on Social Work Practice*, 23(1), 22-33. doi: 10.1177/1049731512459967.
- Paloma, V., García-Ramírez, M., Camacho, C., & Olmedo, L. (2016). How are we studying migrant well-being? A critical view from a liberating community psychology approach. *Community Psychology in Global Perspective*, 2(1), 73-86.
- Peters, J., Nasan, C., & Turner, W. M. (2007). Development and testing of a new version of the hypermasculinity index. *Social Work Research*, 31, 171-182.
- Peterson, N.A., Lowe, J.B., Hughey, J., Reid, R.J., Zimmerman, M.A. & Speer, P.W. (2006). Measuring the intrapersonal component of psychological empowerment: Confirmatory factor analysis of the sociopolitical control scale. *American Journal of Community Psychology*, 38, 287-297. doi: 10.1007/s10464-006-9070-3.
- Peterson, N. A., Peterson, C. H., Agre, L., Christens, B. D., & Morton, C. M. (2011). Measuring youth empowerment: Validation of a sociopolitical control scale for youth in an urban community context. *Journal of Community Psychology*, 39(5), 592-605. doi: 10.1002/jcop.20456.
- Petrillo, G., Capone, V., & Donizzetti, A. R. (2016). Classroom sense of community scale: Validation of a self-report measure for adolescents. *Journal of Community Psychology*, 44(3), 399-409. doi: 10.1002/jcop.21769.
- Rappaport, J. (1981). In praise of paradox: A social policy of empowerment over prevention. *American Journal of Community Psychology*, 9(1), 1-25. doi: 10.1007/BF00896357.
- Rappaport, J. (1987). Terms of empowerment/exemplars of prevention: Toward a theory for community psychology. *American Journal of Community Psychology*, 15(2), 121-148. doi: 10.1007/BF00919275.
- Reid, R. J., Garcia-Reid, P., Klein, E., & McDougall, A. (2008). Violence-related behaviors among Dominican adolescents: Examining the influence of alcohol and marijuana use. *Journal of Ethnicity in Substance Abuse*, 7(4), 404-427. doi:10.1080/15332640802508028.
- Russell, C. J., & Bobko, P. (1992). Moderated regression analysis and Likert scales: Too coarse for comfort. *Journal of Applied Psychology*, 77(3), 336-342. <http://dx.doi.org/10.1037/0021-9010.77.3.336>.
- Serrata, J. V., Hernandez-Martinez, M., & Macias, R. L. (2016). Self-empowerment of immigrant Latina survivors of domestic violence: A promotora model of community leadership. *Hispanic Health Care International*, 14(1), 37-46. doi: 10.1177/1540415316629681.
- Stevens, E. B., Jason, L. A., Ferrari, J. R., Olson, B., & Legler, R. (2012). Sense of community among individuals in substance abuse recovery. *Journal of Groups in Addiction & Recovery*, 7(1), 15-28. doi: 10.1080/1556035X.2012.632319.
- Sturgis, P., Roberts, C., & Smith, P. (2014). Middle alternatives revisited: How the neither/nor response acts as a way of saying "I Don't Know". *Sociological Methods & Research*, 43(1), 15-38. doi: 10.1177/0049124112452527.
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counseling Psychologist*, 34(6), 806-838. doi: 10.1177/0011000006288127.
-

- 
- Wright, A. J., & Stern, S. (2016). The role of spirituality in sexual minority identity. *Psychology of Sexual Orientation and Gender Diversity*, 3(1), 71-79. <http://dx.doi.org/10.1037/sgd0000139>
- Zani, B., & Cicognani, E. (2012). Sense of community in the work context. A study on members of a co-operative enterprise. *Global Journal of Community Psychology Practice*, 3(4).
- Zimmerman, M. A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology*, 23(5), 581-599. doi: 10.1007/BF02506983.
- Zimmerman, M. A. (2000). Empowerment theory: Psychological, organizational, and community levels of analysis. In J. Rappaport & E. Seidman (Eds.), *Handbook of community psychology* (pp. 43-63). New York: Plenum Press.
- Zimmerman, M. A. & Zahniser, J. H. (1991). Refinements of sphere-specific measures of perceived control: Development of a sociopolitical control scale. *Journal of Community Psychology*, 19(2), 189-204. doi: 10.1002/1520-6629(199104)19:2<189::AID-JCOP2290190210>3.0.CO;2-6.

---

**Appendix.**  
**Items of the Abbreviated Sociopolitical Control (SPC) Scale for Youth**

Likert-Type Format

<b>Leadership Competence Subscale</b>					
	Strongly Disagree (1)	Somewhat Disagree (2)	Neutral (3)	Somewhat Agree (4)	Strongly Agree (5)
SPC1. I am often a leader in groups.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SPC2. I would rather have a leadership role when I'm involved with a group project.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SPC3. I can usually organize people to get things done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SPC4. I find it very easy to talk in front of a group.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Policy Control Subscale</b>					
	Strongly Disagree (1)	Somewhat Disagree (2)	Neutral (3)	Somewhat Agree (4)	Strongly Agree (5)
SPC5. Youth like me can really understand what's really going on with my community or school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SPC6. Youth like me have the ability to participate effectively in community or school activities and decision making.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SPC7. There are plenty of ways for youth like me to have a say in what our community or school does.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SPC8. Most community or school leaders would listen to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

### Phrase Completion Format

#### **Leadership Competence Subscale**

SPC1. In groups, I am often\_\_\_\_\_.

a follower										a leader
1	2	3	4	5	6	7	8	9	10	

SPC2. When I'm involved in a group project, I would rather have \_\_\_\_\_.

a following role										a leadership role
1	2	3	4	5	6	7	8	9	10	

SPC3. I can \_\_\_\_\_ organize peers to get things done.

almost never										almost always
1	2	3	4	5	6	7	8	9	10	

SPC4. I find it \_\_\_\_\_ to talk in front of a group.

very hard										very easy
1	2	3	4	5	6	7	8	9	10	

#### **Policy Control Subscale**

SPC5. I can \_\_\_\_\_ what's going on with (Community Name).

not understand										really understand
1	2	3	4	5	6	7	8	9	10	

SPC6. I have \_\_\_\_\_ to participate effectively in activities and decision making in (Community Name).

very little ability										great ability
1	2	3	4	5	6	7	8	9	10	

SPC7. There are \_\_\_\_\_for youth like me to have a say in what (Community Name) does.

very few ways										plenty of ways
1	2	3	4	5	6	7	8	9	10	

SPC8. Most community leaders in (Community Name) would \_\_\_\_\_ listen to me.

almost never										almost always
1	2	3	4	5	6	7	8	9	10	